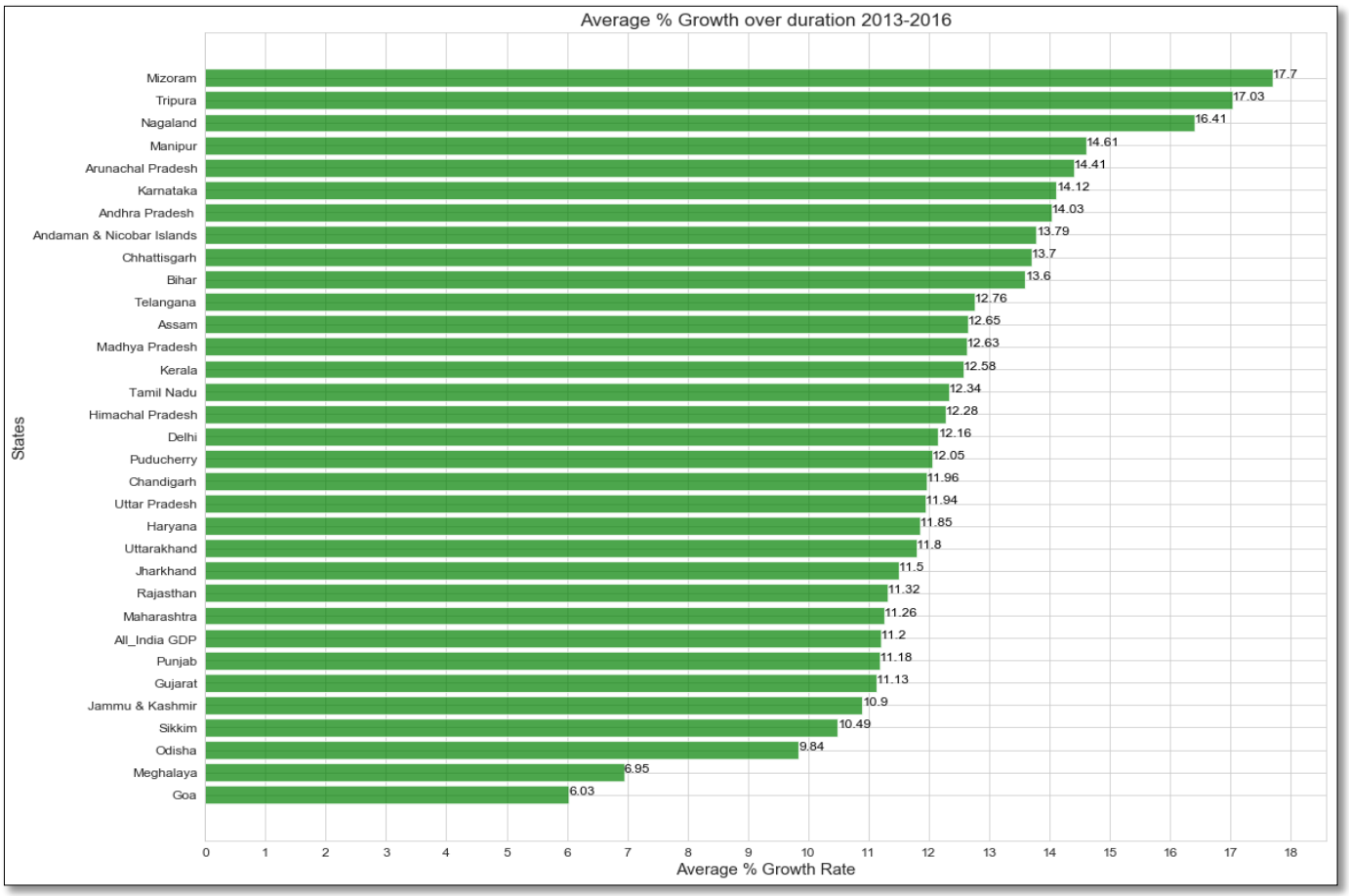
GDP Analysis of Indian States

- ***Mean average GDP growth of states over the duration 2013-14, 2014-15 and 2015-16:***

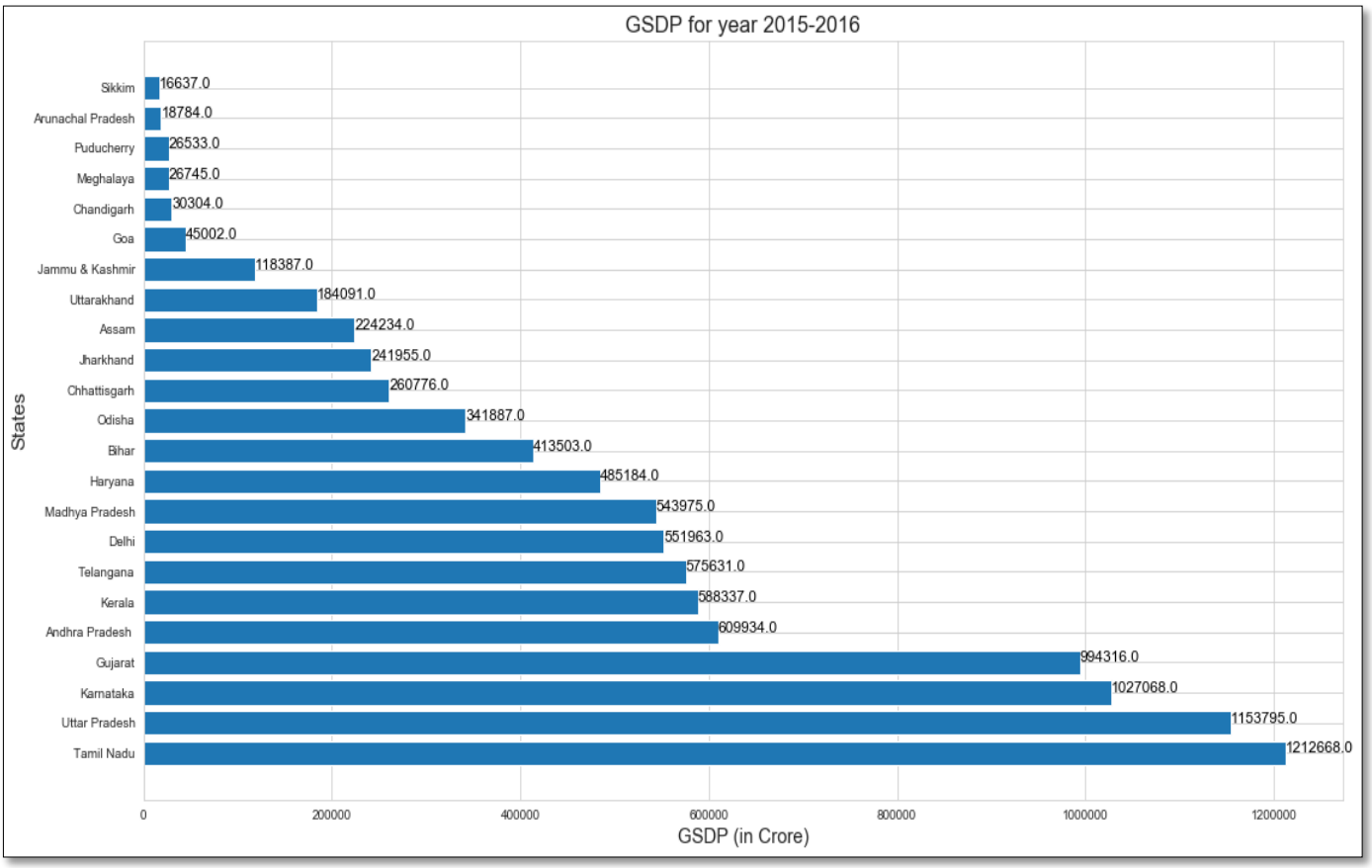
    - Mizoram, Tripura and Nagaland have been growing consistently fast while; Goa, Meghalaya and Odisha have been struggling.
    - The average growth rate of my home state i.e. Uttar Pradesh is 11.94%. In comparison to the national average i.e. 11.2%, my home state has a higher growth rate with a difference of 0.74%.



- ***Total GDP of the states for the year 2015-16:***

    - *Top 5 states based on the total GDP in the decreasing order:*
        - Tamil Nadu
        - Uttar Pradesh
        - Karnataka
        - Gujarat
        - Andhra Pradesh

    - *Bottom 5 states based on the GDP in increasing order:*
        - Sikkim
        - Arunachal Pradesh
        - Meghalaya
        - Chandigarh
        - Goa

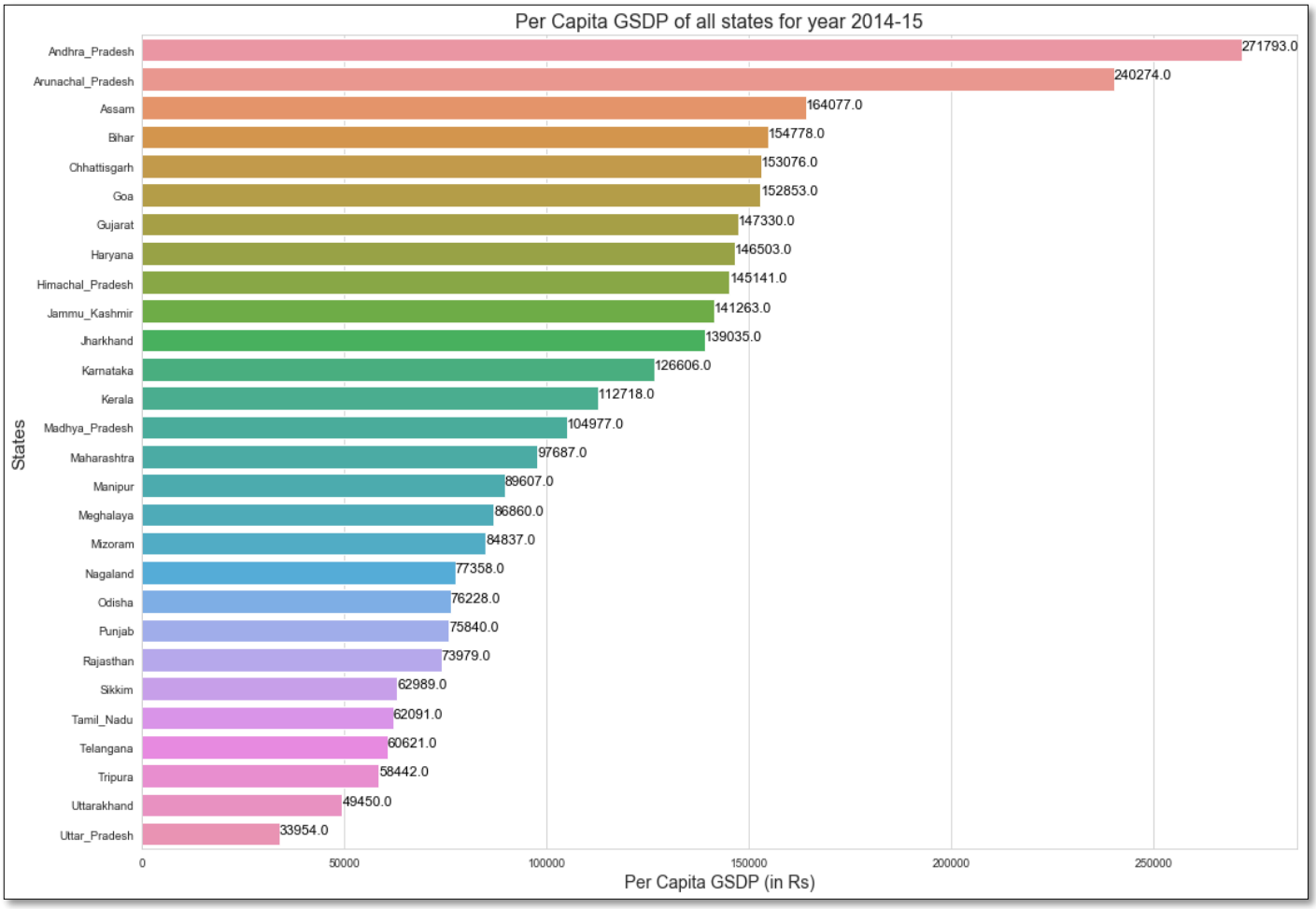


- ***Total and per capita GDP***:

    - *Top 5 states based on the total GDP per capita in the decreasing order:*
        - Andhra Pradesh
        - Arunachal Pradesh
        - Assam
        - Bihar
        - Chhattisgarh

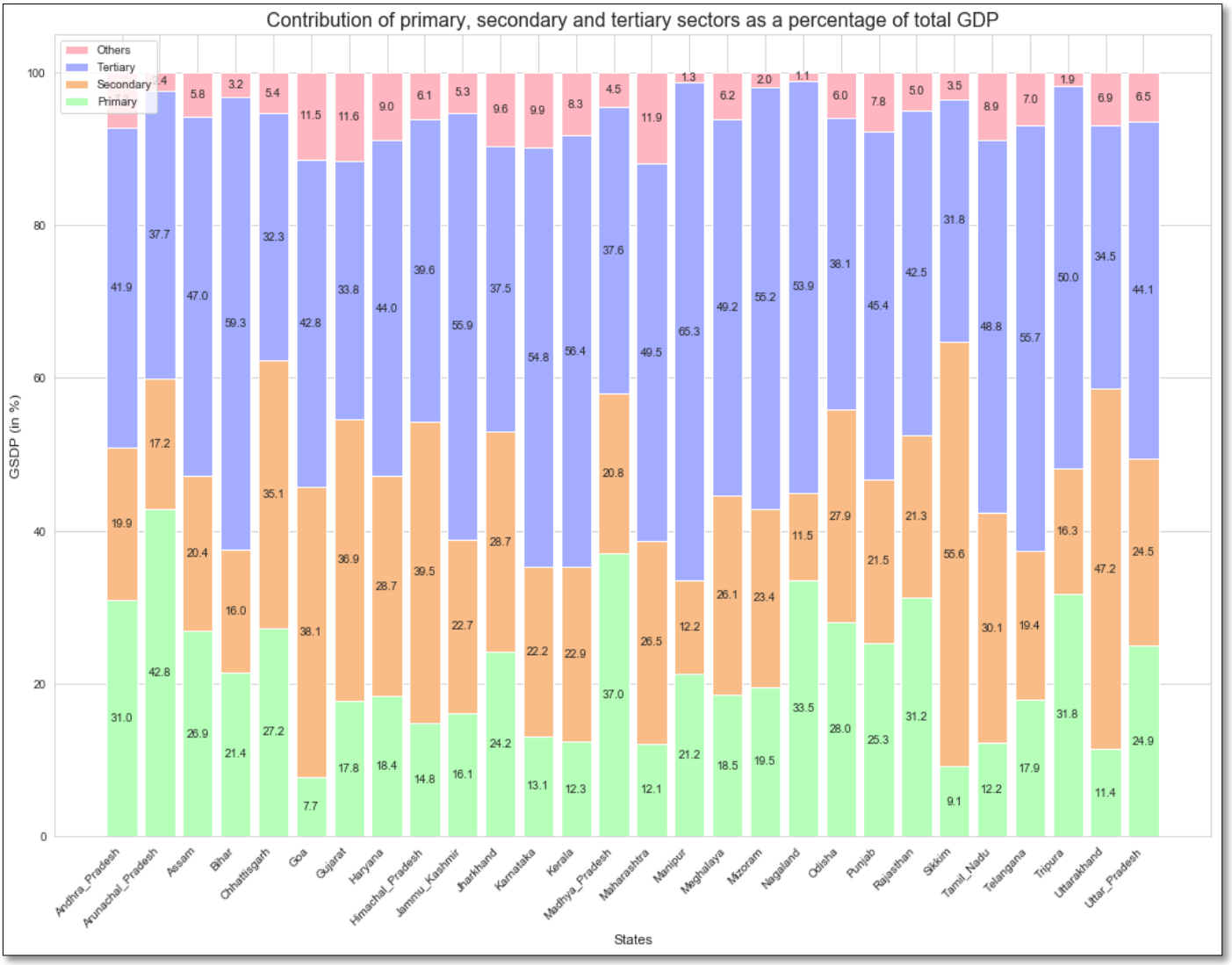
    - *Bottom 5 states based on the GDP per capita in increasing order:*
        - Uttar Pradesh
        - Uttarakhand
        - Tripura
        - Telangana
        - Tamil Nadu

    - *Ratio of highest per capita GDP to the lowest per capita GDP:* **8:1**



- ***Percentage contribution of primary, secondary and tertiary sectors as a percentage of GSDP for relevant states:***

    - Contribution of 'Tertiary' sector as a percentage of total GDP is 'Maximum'.
    - Arunachal Pradesh has the highest contribution in the primary sector i.e. 42.8% of total GDP; while Goa is struggling with 7.7% of total GDP.
    - Sikkim has the highest contribution in the secondary sector i.e. 55.6% of total GDP; while Nagaland is struggling with 11.5% of total GDP.
    - Manipur has the highest contribution in the tertiary sector i.e. 65.3% of total GDP; while Sikkim is struggling with 31.8% of total GDP.
    - A maximum tax exclusive of subsidy is being paid in Maharashtra i.e. 11.9% of total GDP.



- ***After dividing the states into categories on the basis of quantiles, GDP contribution by each sub-sector:***

    - Top sub sectors which contribute to approx 80% of the GSDP of each category decreasingly are:

        - *Category C1:*
            - Manufacturing
            - Agriculture, forestry and fishing
            - Trade, repair, hotels and restaurants
            - Real estate, ownership of dwelling and professional services
            - Construction

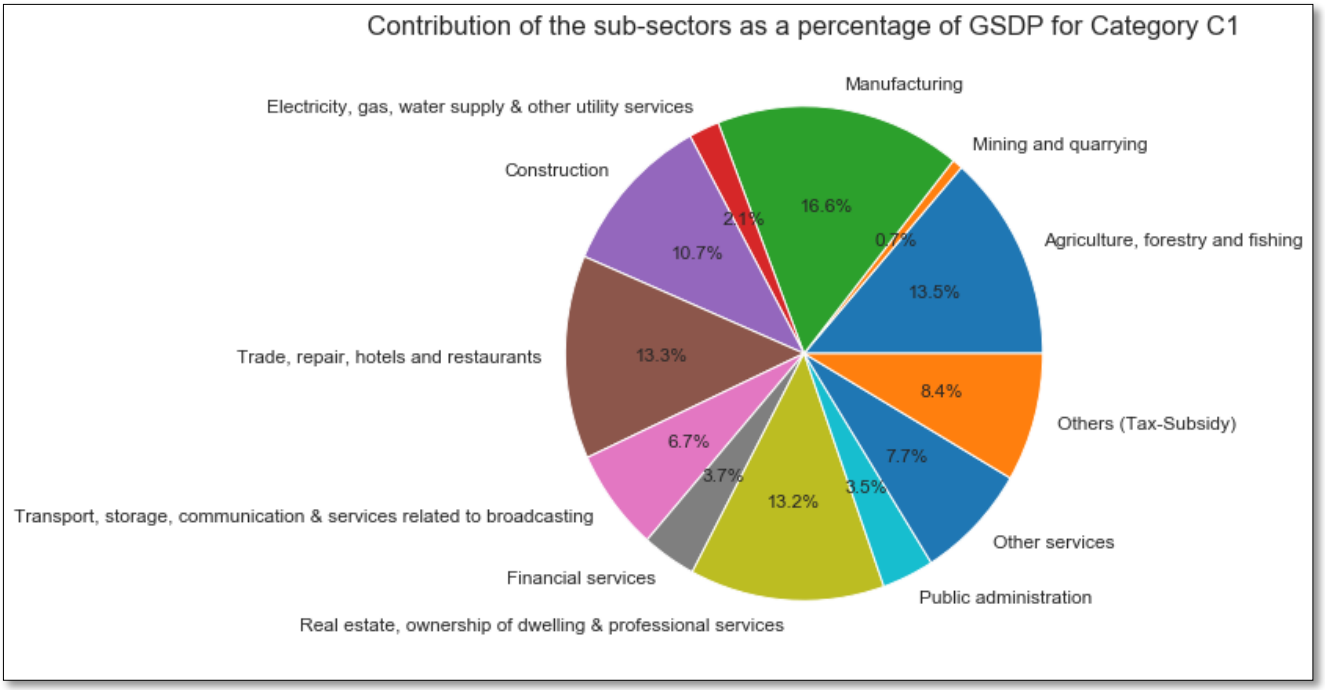
        - *Category C2:*
            - Manufacturing
            - Real estate, ownership of dwelling and professional services
            - Agriculture, forestry and fishing
            - Trade, repair, hotels and restaurants
            - Construction
            - Other Services

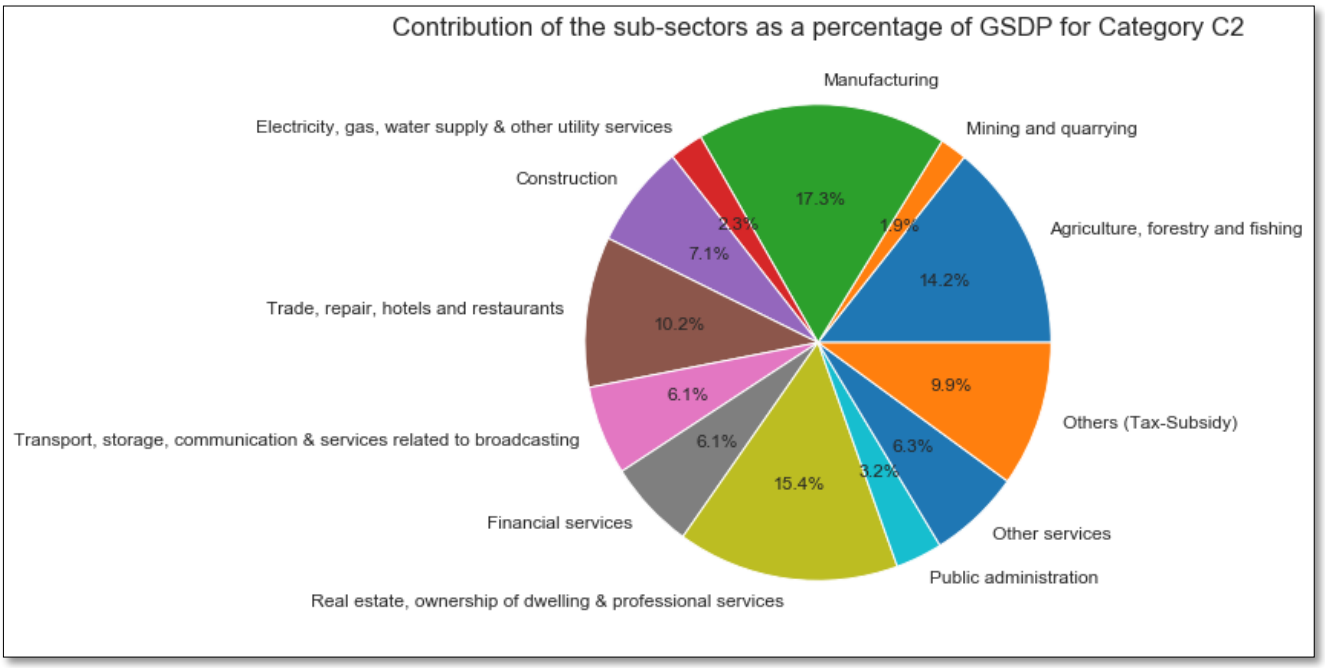
        - *Category C3:*
            - Agriculture, forestry and fishing
            - Manufacturing
            - Trade, repair, hotels and restaurants
            - Real estate, ownership of dwelling and professional services
            - Construction
            - Other Services

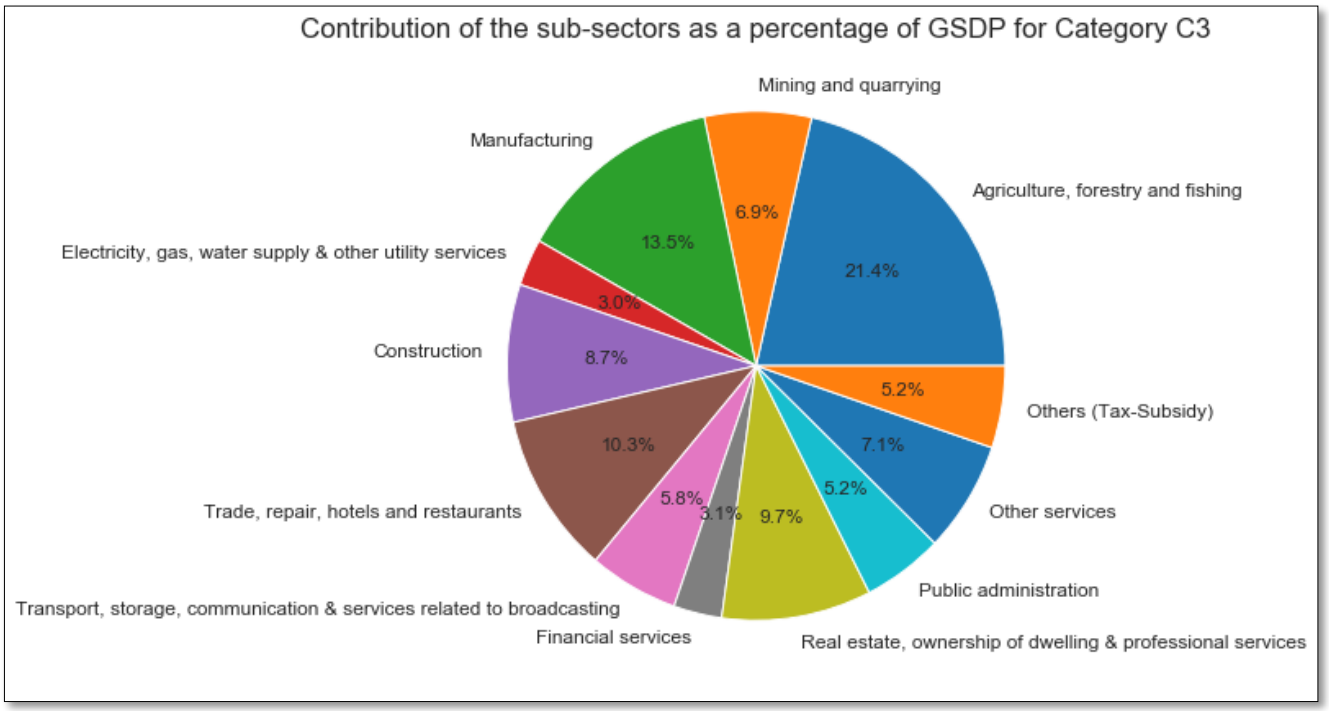
        - *Category C4:*
            - Agriculture, forestry and fishing
            - Trade, repair, hotels and restaurants
            - Manufacturing
            - Real estate, ownership of dwelling and professional services
            - Construction
            - Transport, storage communication and services related to broadcasting

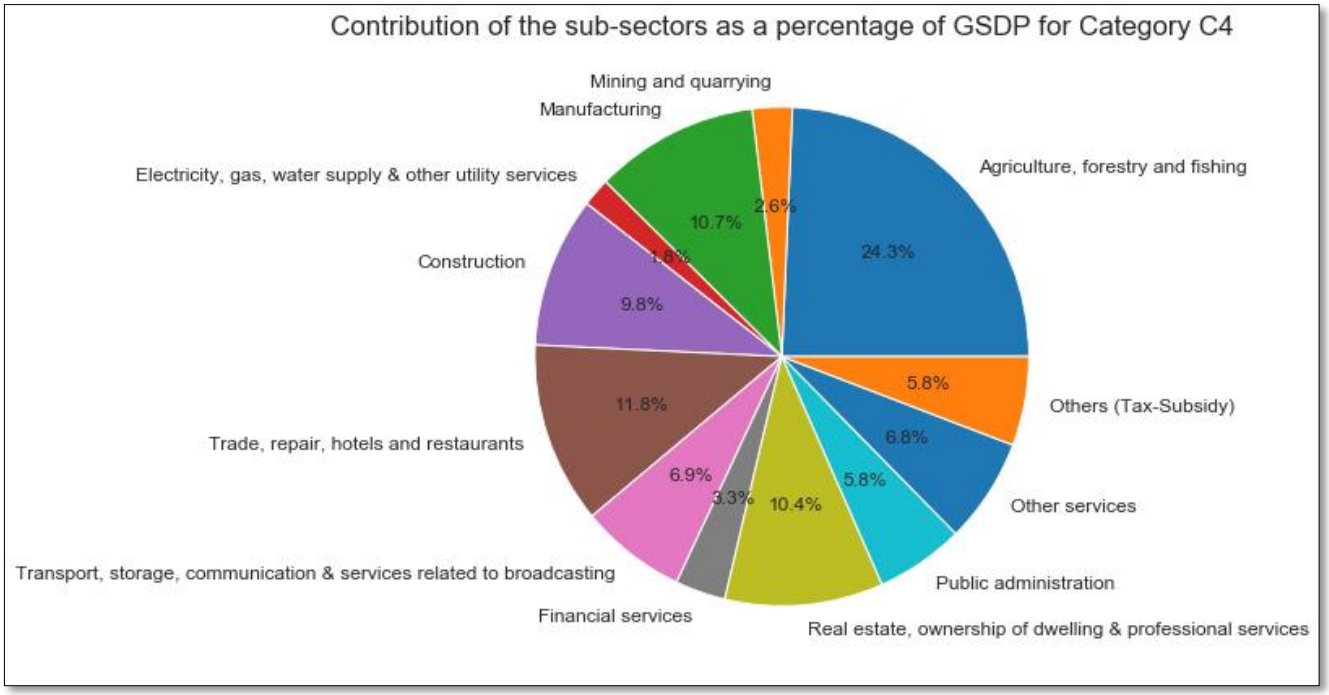
    - As we can see in category C1, more GDP contribution is from the sectors such as Manufacturing, Construction, Trade, hotels and restaurants, Real estate and professional services, and transport etc.
      As we move towards the other categories, the contribution of these sectors start decreasing and Agriculture, forestry and fishing become the major contributor of GDP.
      This means, the states in C1 category are more developed than states in other categories as they are indulged in elite jobs compared to other categories that are working in agriculture and fishing.

- *Sub-Sectors which seem to be correlated with high GDP are:*
  - Agriculture, forestry and fishing
  - Manufacturing
  - Real Estate, ownership of dwelling & professional services
  - Trade, repair, hotels and restaurants
- *Sub-Sectors which various categories need to focus on:*
  - Electricity, gas, water supply & other utility services
  - Public administration
  - Mining and quarrying
  - Financial Services









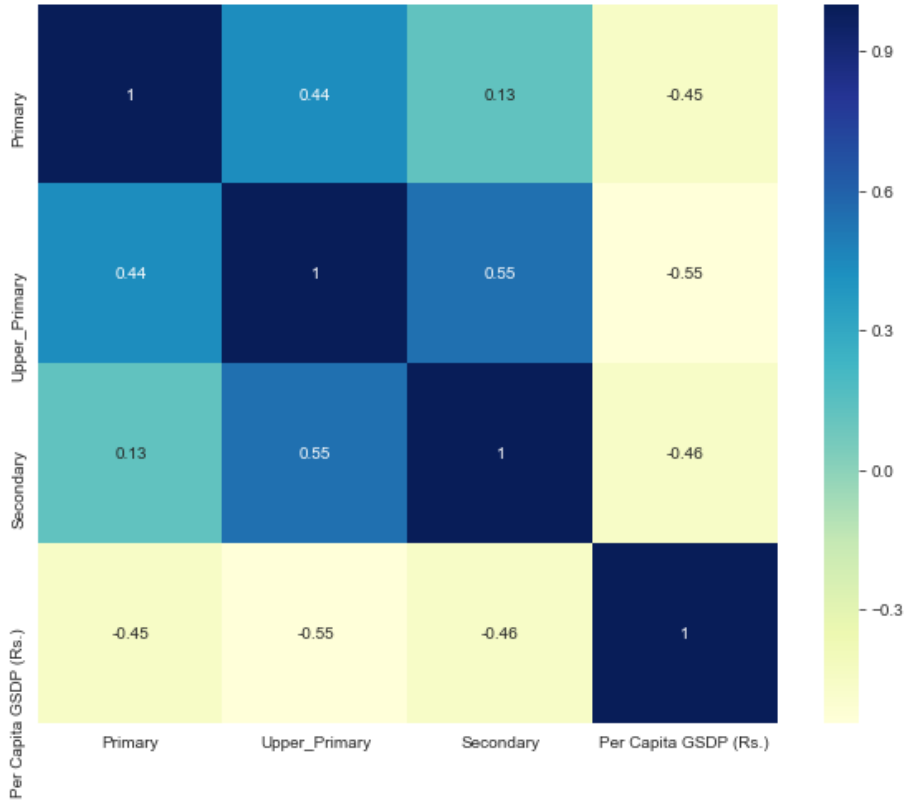
- ***Recommendations for each category to improve the per capita GDP***
  - ***Category C4:***
    - It should focus on Manufacturing sub sector i.e. Raw products produced from agriculture must be send directly to manufacturing industries. This help industries to get raw material at low cost and will increase the production.
    - Storage and Transport sub sector should also need to focus on as a large amount of raw product is produced by agriculture. This help farmers to store vegetables, grains etc in cold storage and they can sell it based on their need and when price is high of these products.

- ***Category C3:***
  - This category has a lot of natural resource in their land. Places need to be searched that contain minerals and gas.
  - Also, this category focus on producing electricity, gas and other utilities. Minerals produced in this category must be used in making wire and pipes such that electricity and gas can be transferred from one place to another which will help in increasing GDP per capita.

- ***Category C2:***
  - States under this category are in developing phase. Construction sub sector need to be focused on such that good infrastructure move this category towards developed site.
  - Also, financial services should be focused on as this will help states to grow drastically.

- ***Category C1:***
  - States under this category are much focussed on trade, hotels, restaurants etc as high standard people lives in these states having high income. State should focus much on broadcasting and transporting as time is a critical factor for people living in these states.

- ***Correlation of GDP per capita with dropout rates in education (primary, upper primary and secondary) for the year 2014-2015 for the states***
  - Below chart shows that Per Capita GDP hold negative correlation with all the three different levels of education. This means they are inversely proportional to each other by some factor. If dropout rate increases then Per Capita GDP decreases.



- Now correlation coefficient tells us how much change in these things affect one another. Dropout rate in Upper Primary education has the highest correlation coefficient which means per capita GDP depends much on Upper Primary Education than Primary or Secondary education.
- Meanwhile Primary and Secondary education has also a big role in increasing per capita GDP.

Hypothesis:

- If anyone fails to pass in primary education then it directly affects dropout rate in upper primary and secondary education as that person will not going to do upper primary or secondary education.
- If dropout rates are high then GDP per capita will automatically falls down.
- If a person completes Upper Primary Education then he/she will help in increasing GDB per capita.
- If literacy rate increases, GDB per capita will automatically increase, i.e. less dropout rates.